UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,580	04/07/2005	David B. Jackson	010-0028-US	6991

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EXAMINER
CASANOVA, JORGE A

ART UNIT	PAPER NUMBER
2159	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

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<td rowspan="2">Office Action Summary</td>
<td>Application No.
10/530,580</td>
<td>Applicant(s)
JACKSON, DAVID B.</td>
</tr>
<tr>
<td>Examiner
JORGE A. CASANOVA</td>
<td>Art Unit
2159</td>
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2008*.

2a)☐ This action is **FINAL**.　　　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 October 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

DETAILED ACTION

1.   Examiner notes that there were multiple sets of claims filed on different dates,

however, the Examiner will examine the last set of claims filed on 10/15/2008.

2.   Claims 1-16 are presented for examination.

3.   This Office action is **Non-Final**.

Information Disclosure Statement

4.   The information disclosure statements (IDS) filed on 04/08/2008 and 09/21/2009

have been considered by the Examiner and made of record in the application file.

Claim Objections

5.   Claims 1, 2, 5, 6, 8, 9, 12, 13, 15 and 16 are objected to because of the following

informalities: the phrase "compute environment" should be --computing environment--,

see preamble and 1st limitation of the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

7.   Claims 8-16 rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

8.   With respect to claims 15 and 16, the claims fail to place the invention squarely

within one statutory class of invention. The Applicant defines computer-readable

mediums as, "By way of example, and not limitation, such computer-readable media

can comprise RAM, ROM, EEPROM, CD-ROM or other optical disk storage, magnetic

disk storage or other magnetic storage devices, or any other medium which can be

used to carry or store desired program code means in the form of computer-executable

instructions or data structures; When information is transferred or provided over a

network or another communications connection (either hardwired, wireless, or

combination thereof) to a computer, the computer properly views the connection as a

computer-readable medium." See ¶0031 of the instant specification. Accordingly, the

computer-readable medium can include signals (i.e., propagate, electromagnetic,

infrared, or propagation medium). Signals are not one of the four categories of

invention (i.e., process, machine, manufacture, or composition of matter) and therefore

the claims are not statutory. Signals are not a series of steps or acts and thus are not a

process. Signals are not a physical article or object and as such are not a machine or

manufacture. Signal are also not a combination of substances and therefore not a

composition of matter. Further, in such embodiments, the "computer program product"

is still unable to act as a computer component and have its functionality realized. Also,

"A transitory, propagating signal is not a 'process, machine, manufacture, or

composition of matter.' Those four categories define the explicit scope and reach of

subject matter patentable under 35 U.S.C. §101; thus, such a signal cannot be

patentable subject matter." See *In re Nuijten*, 84 USPQ2d 1495 (Fed. Cir. 2007).

The Applicants should further amend the claims so that said computer-readable

medium as intended by the Applicant is to **not** include media used to communicate or

contain a propagated signal, or a propagated signal by itself, or a program by itself, or a

propagation medium, or a modulated data signal. The claims clearly should distinguish

that the computer-readable medium in the instant specification is hardware for storing,

said computer-readable storage medium is to be limited to non-transitory media

including semiconductor devices or solid state memory devices, flash memory,

magnetic tape, magnetic cassette, removable computer diskette, random access

memory (RAM), read-only memory (ROM), electrically erasable programmable read-

only memory (EEPROM), rigid magnetic disk, hard disk drive and optical disk devices,

as well as, compact disk - read only disk (CD-ROM), a compact disk - read/write disk

(CD-R/W), optical disk and a digital versatile disk (DVD). **(emphasis added)**

9.   With respect to claims 15 and 16, they are further rejected as software, *per se*,

since it is not clear if the storage medium is actually hardware. The claims are not

directed to a process, machine, manufacture, or composition of matter within the

meaning of 35 U.S.C. 101; as such the claimed invention is directed to non-statutory

subject matter. As mentioned *Supra*, Applicant should amend the claims so that said

computer-readable medium as intended by the Applicant is to **not** include media used

to communicate or contain a propagated signal, or a propagated signal by itself, or a

program by itself, or a propagation medium, or a modulated data signal.

10.   With respect to claims 8-14, the claimed invention are directed to a system which

was described software, *per se*, i.e., see ¶0019 of the instant specification, regarding

"the "system" embodiment of the invention may comprise a computing device that

includes the necessary hardware and software components to enable a workload

manager or a software module performing the steps of the invention; There is no

restriction that the particular system embodiment of the invention has any specific

hardware components and any known or future developed hardware configurations are

contemplated as within the scope of the invention when the computing device operates

as is claimed." The claims are not directed to a process, machine, manufacture, or

composition of matter within the meaning of 35 U.S.C. 101; as such the claimed

invention is directed to non-statutory subject matter. The Examiner recommends

amending the claims to include hardware-specific structure in order to obviate the above

rejection.

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

12.   Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chandrasekaran (US 2005/0097569 A1) hereinafter "Chandrasekaran", further in view

of *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

13.   With respect to claims 5, 12 and 16, the Chandrasekaran reference teaches a

method, system and computer-readable medium of creating object messages in a

compute environment comprising multiple nodes under common management for

viewing by a user [see Title, regarding event notification in a clustered computing

environments], the method, system and computer-readable medium comprising:

upon an event affecting the availability or performance of an object within a

compute environment, retrieving messages related to the event [see ¶0004, regarding

an event, within the context of the present invention, denotes a change in system state,

configuration or any other parameter of interest; For example, users and/or programs

accessing a database may need notification upon the occurrence of specific system

events, such as database startups or shutdowns, when the system is running out of disk

space or roll back segments, or on the occurrence of logons and logoffs].

Chandrasekaran teaches the method, system and computer-readable medium of

creating object messages in a compute environment, as referenced above.

Chandrasekaran does not explicitly teach that the messages are generated from

messages logs in different layers of the compute environment.

Chandrasekaran teaches receiving notifications upon the occurrence of specific

system events occurring directly but not from a message log.

However, it would have been obvious at the time the invention was made to a

person having ordinary skill in the art to which said subject matter pertains to modify the

teachings of Chandrasekaran to store events occurring on the clustering computing

environment into a file such as, a journal, record or a log. This would enable

Chandrasekaran to maintain a history of events that have occurred in the clustered

computing environments. This may also be beneficial for administrators in that they can

at any moment retrieve comprehensive information such as a type of event and date-

time and location at which an event occurred for the purpose of monitoring and

managing the system. See *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385

(U.S. 2007).

Chandrasekaran as modified teaches the method, system and computer-readable medium of creating object messages in a compute environment, as referenced above.

Chandrasekaran further teaches aggregating the retrieved messages into a single location [see maintain a history of events that have occurred in the clustered computing environments; as maintained by the Examiner, since the events are being recorded or logged to a file, the message are being aggregated into a single location];

associating the aggregated messages with the object [see ¶0004, regarding likewise, users could need notification on the occurrence of specific data events, such as when inventory for an item falls below a critical threshold so that items can be ordered in a timely manner; In each case, action can be taken based on such system or data related information extracted or otherwise obtained from the database or computer system; as interpreted by the Examiner, the notification is being associated with an event that has occurred in a particular node]; and

Chandrasekaran does not explicitly teach if a user submits a job and the performance of the job within the compute environment is affected by the event, notifying the user of the event using the associated messages.

However, Chandrasekaran teaches users and/or programs accessing a database may need notification upon the occurrence of specific system events, such as database startups or shutdowns, when the system is running out of disk space or roll back segments, or on the occurrence of logons and logoffs, see ¶0004. As modified, in an example where the user is performing a job such as installing a program to a node in

the clustered environment this would entail that the user is adding more data to a disk,

and should the system be running out of disk space, the notification system will notify

that user of such event so that the user may appropriately handle the situation such as

freeing up space, or adding a new disk to the clustered environment.

14.   With respect to claims 6 and 13, Chandrasekaran as modified teaches the

method and system of clams 5 and 12, as referenced above. Chandrasekaran further

teaches wherein the object is a node in the compute environment [see ¶0058, regarding

event notifications may be appended to messages being sent on network link 420

between nodes 400-1, 400-2, and 400-3].

15.   With respect to claims 7 and 14, Chandrasekaran as modified teaches the

method and system of clams 5 and 12, as referenced above. Chandrasekaran further

teaches wherein the object is one of a reservation, user, group of users, class, QOS,

resources manager, scheduler and peer service interface [see ¶0004, regarding system

users are typically interested in knowing about any system changes that could affect

them so that they can take action, if necessary; For example, users and/or programs

accessing a database may need notification upon the occurrence of specific system

events, such as database startups or shutdowns, when the system is running out of disk

space or roll back segments, or on the occurrence of logons and logoffs; Likewise,

users could need notification on the occurrence of specific data events, such as when

inventory for an item falls below a critical threshold so that items can be ordered in a

timely manner; as interpreted by the Examiner, said event notification message are a

reservation, user, group of users, class, QOS, resources manager, scheduler and peer service interface].

16.   With respect to claims 1, 4, 8, 11 and 15, they are rejected on grounds corresponding to above rejected claims 5, 12 and 16, because the limitations of claims 1, 4, 8, 11 and 15 have are substantially equivalent to the claims of 5, 12 and 16.

17.   With respect to claims 2, 3, 9 and 10, they are rejected on grounds corresponding to above rejected claims 6, 7, 13 and 14, because claims 2, 3, 9 and 10 are substantially equivalent to claims 6, 7, 13 and 14.

Prior Art Made of Record

18.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

   ❖ Arnone et al. teaches a method and system for secure alert messaging.

   ❖ Mahiik et al. teaches a self-correcting monitor.

   ❖ Young teaches a system and method for integrated data analysis and management.

   ❖ Chandra et al. teaches methods and apparatuses for providing electronic messages that are linked and aggregated.

Conclusions/Points of Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JORGE A. CASANOVA whose telephone number is

(571) 270-3563. The examiner can normally be reached on Mon. - Fri., 7:15 a.m. - 5:45 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James K. Trujillo can be reached on (571) 272-3677. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JORGE A CASANOVA/   /James Trujillo/
Examiner, Art Unit 2159   Supervisory Patent Examiner, Art
                                                Unit 2159